

**ABSTRACT OF THE DISCLOSURE**

An apparatus, a system and a method are provided for monitoring position of a machine element within a mechanical system and/or cleaning a machine element. A  
5 light source and sensor may be positioned within a cylinder. The sensor may detect the intensity of light within the cylinder as a shaft element moves throughout the cylinder. The measurement may indicate the position of the shaft element within the cylinder. An aperture may be  
10 placed within the cylinder to enable light to enter the cylinder. In addition, a seal, a wire brush and/or a bronze brush may be placed near an end wall of a cylinder. The seal may surround the shaft element.